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Doubrava et al.

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[54] **DYNAMICALLY-ADJUSTABLE SCANNING RATE IN DIGITIZERS**

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[52] **U.S. Cl.** **178/18;** 178/19

[58] **Field of Search** 178/18, 19, 20; 304/706, 705, 711, 712

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[57] **ABSTRACT**

Methods and apparatus for setting the signal-sampling period of each grid wire in a digitizing tablet having grid wires that are sequentially and repetitively scanned to develop a positional signal related to a cursor so as to reduce jitter associated with non-movement of the cursor and signal error associated with rapid movement of the cursor. The method comprises setting the signal-sampling period of each grid wire to a longest signal-sampling period the digitizer tablet is designed to employ if the cursor is not moving and setting the signal-sampling period of each grid wire to a value inversely related to the present speed of movement of the cursor such that the faster the present speed of movement of the cursor the shorter the signal-sampling period of each grid wire as compared to the longest signal-sampling period the digitizer tablet is designed to employ. The present position of the cursor is then saved as the prior position of the cursor for the next time the steps of the method are performed. The method can also be applied to other positional determination devices in which a cursor is moved over a scanned sensing surface. The apparatus performs the method.

12 Claims, 3 Drawing Sheets